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ROCKY FLATS
ENVIRONMENTAL RESTORATION QUARTERLY
PUBLIC MEETING
FORMAL PUBLIC COMMENTS

Arvada Center for the Arts and Humanities
5555 Wadsworth Boulevard
Arvada, Colorado

Wednesday, September 18, 1996

I N D E X

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2	<u>Speakers from Audience</u>
3	Tim Holeman - City of Broomfield
4	Paula Elofson-Gardine - Environmental Information Network
5	Hank Stovall - Broomfield City Council
6	<u>Facilitator</u>
7	Dennis Connors
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1 P R O C E E D I N G S

2 MR HOLEMAN Hi, my name is Tim Holeman, I'm a
3 representative of the City of Broomfield Hank Stovall,
4 Councilman Stovall, is also here tonight, and I'll be
5 speaking regarding the City's position on the remedial
6 investigation on OU3 That's Holeman, H-O-L-E-M-A-N, I

7 [REDACTED]

8 We'd like to express our thanks to DOE for what we
9 consider some pretty good work on getting the data together
10 and conducting this information John Rampe and company we
11 believe have been very accessible and very informed on what
12 is truly a difficult subject

13 The City of Broomfield believes that the ongoing
14 program for cleanup of the Rocky Flats site as embodied in
15 the ten-year plan is a good plan and that focusing on the
16 highest risks first is truly the way to go. And to use their
17 cliché, it's plutonium stupid, we agree with that But that
18 same cliché also applies to off-site soil contamination and
19 contamination in our reservoir, Great Western We also
20 believe that it's the plutonium stupid, and as Deminima says,
21 it may be we still believe it's a critical long-term public
22 health issue for our citizens

23 We will be submitting written comments by the end
24 of the public comment period, and so these will be delivered
25 verbally

1 We believe that the decisions you make today on
2 this RI have long-term implications for our community, both
3 economically, environmentally, and for our citizens' public
4 health They may not show up today, but we believe that
5 whenever you're talking about plutonium you have to think
6 about not just one generation but multiple generations

7 With that in mind, we have several initial
8 comments Initially, we believe that leaving residual
9 plutonium in the sediment and shoreline, while certainly not
10 welcome by the citizens of Broomfield, may be an unfortunate
11 practical solution in the short run City of Broomfield has
12 required a new water supply because of past accidents and the
13 prospect of future accidents, and we're about to use the
14 reservoir for a re-use facility At this time it doesn't
15 appear that DOE has come up with a viable plan to drain and
16 dredge the reservoir, and we're not entirely convinced that
17 that would be in the public interest, either Nevertheless,
18 we don't believe that leaving residual amounts of plutonium
19 in the sediment and the shoreline and the off-site soils is
20 in the long-term public health interests of our citizens We
21 couldn't say to you today, in light of the analysis you've
22 done, which we think is vigorous and well done, that it does
23 pose a threat today But what we're concerned about is not a
24 point in time, we're concerned about the long-term and what
25 residual amounts mean today on top of additional loading

1 presented by future activities of cleanup, resuspension of
2 soils, etc , etc

3 We believe, in light of that, that regular review
4 of sediment contamination levels and remediation alternatives
5 should be a condition of a no action alternative We, based
6 on John Rampe's comments, believe that you need an annual
7 review You need not just a five-year review under CERCLA,
8 but you need an annual review to determine whether or not
9 additional loading of plutonium, that invariably will move
10 through sediments, through erosion, into drainage basins, and
11 in particular our basin, Walnut Creek We believe that that
12 requires an annual review if you're going to proceed with a
13 no action alternative

14 We don't agree with your conclusion that you
15 shouldn't have conducted a feasibility study We understand
16 that you don't believe that there's enough there to do a
17 feasibility study, but we believe the Department should have
18 engaged in an effort to look at alternatives for removing
19 ostensibly hot spots, that we believe are hot spots--you may
20 not believe--but we believe that somebody should have looked
21 at coming in and taking out some of the higher hot spots that
22 exist in the shoreline and in the sediment

23 But in the absence of a formal feasibility study,
24 we once again believe you should conduct a future review of
25 plutonium health risks and the prospects of using innovative

1 technology to remove possibly even residual amounts of
2 plutonium, particularly along the shoreline We would like
3 to know what DOE is doing to identify and locate innovative
4 soil washing techniques

5 Two more comments--three more comments

6 We believe future cleanup activities under the ten-
7 year plan could substantially alter the long-term prospect of
8 plutonium loading in the drainage. We think DOE should
9 conduct additional modeling and documentation of the prospect
10 for future loading Ongoing studies regarding plutonium
11 mobility and transport, i e the activities going on under
12 the Health Advisory Committee, we think should lend
13 additional information to you about whether or not additional
14 loading in the drainage basin poses a risk

15 We believe that recent alterations in DOE's
16 processed water management program, particularly the
17 interceptor trench waters, have substantially changed the
18 assumptions made in the RI regarding releases into Great
19 Western We'd like DOE to reassess its assumptions regarding
20 downstream releases in light of those changes for upstream
21 water management programs

22 Finally, as DOE undertakes its ongoing RCRA/CERCLA
23 decision-making process, we think that you probably need to
24 inform us on how this decision will be incorporated into the
25 final--what we understand to be the final rod on the entire

1 site It's my understanding that the ten-year plan, after
2 they clean up the site, they will ultimately do a final
3 Record of Decision on the entire site We think that the
4 Great Western Reservoir and off-site facilities such as
5 Standley Lake should be included in reconsideration under the
6 final rod Now that's a ten-year, fifteen-year time frame,
7 but we believe that gives us a backstop

8 And finally, we're not--we believe DOE must
9 demonstrate that existing levels of residual plutonium or
10 potential future releases into the soil or reservoir do not
11 jeopardize the value and usefulness of this important city
12 aspect Specifically, how will the no action level impact
13 the 1985 lawsuit between landowners and DOE and the third
14 party beneficiary agreement, including our city, regarding
15 soils cleanup? The city is not completely convinced that the
16 proposed action meets the spirit and intent of the 1985
17 settlement, and we'd like DOE to speak to the question of
18 achieving the state soil construction cleanup standards of 9
19 picocuries per gram as it relates to this RI.

20 -- Thank you very much

21 MR CONNORS: Thank you, Tim

22 Anybody else? Paula, the mike is yours.

23 MS ELOFSON-GARDINE My name is Paula Elofson-
24 Gardine, E-L-O-F-S-O-N hyphen G-A-R-D-I-N-E, Environmental
25 Information Network, POB 280087, Lakewood 80228

1 I have a number of concerns here, and I have to
2 apologize that we've been gone for most of the last six
3 months, but this is a very important issue, which is why I
4 bothered to come tonight

5 Number of concerns we have has been related to air
6 pathway flows and deposition of contaminants released by
7 Rocky Flats and assertions made by a variety of contractors
8 that in essence all of these releases fall out in a big clump
9 around the plant and they can quantitate the releases by soil
10 sampling, which we feel is misleading and ludicrous With
11 the very high winds that we have here, in excess of 100 miles
12 per hour, our contention is that the majority of releases
13 have been blown far beyond the perimeter monitors and on out
14 into the communities. So we feel that a lot of the sampling
15 that has gone on too close to the plant has not well tracked
16 past releases

17 Concomitant with that, there is a lot of concern
18 about the cutbacks in air monitoring and less frequent water
19 monitoring going on around the facility

20 I would like to second some of the comments by Tim
21 Holeman with respect to wanting further investigations I
22 am--I have to say yes, plutonium is a big concern, however, I
23 haven't seen very much tracking of americium, which is a
24 daughter product of plutonium In particular, we would like
25 to see a much broader aerial gamma survey done of the whole

1 area instead of just to the edges of the buffer zone We
2 feel it's very important to undertake aerial gamma surveys to
3 track americium around some of the local communities, for
4 example, parts of Westminster, such as Countryside, Walnut
5 Creek, perhaps a little bit farther out to the south of
6 Standley Lake, Leyden, and northwest Arvada We feel that
7 these areas have been overlooked for decades and that they
8 are the maximally exposed communities from the major
9 accidents and releases at the facility

10 And we feel that since there is still remediation
11 to occur on site, in addition to dismantling or tearing down
12 buildings, that there is still great risk to the community of
13 migration of contaminants off site and that this is not well
14 addressed in terms of recontamination of OU3, and that this
15 should be pursued as an alternative risk pathway workup with
16 respect to OU3, RIFS, and final decision

17 We have other comments we'd like to make, but we
18 will hopefully have some time to do written comments before
19 the end of your comment period. Thank you

20 --- MR CONNORS Well, it's not quite 7 00 yet, so we
21 can stand here and kind of look at each other or additional
22 people can come up and offer comments or we can take a quick
23 time out and come back in about five minutes and see if there
24 are any other additional comments, and then we'll move into
25 Action Level Frameworks

1 Sounds like the popular vote is for take a break,
2 since Paula's steamrolling out We'll reconvene in about
3 five minutes and see if there are any more comments before we
4 kick off Action Levels, okay?

5 (Whereupon, a break was taken)

6 MR STOVALL. Hank Stovall, 1115 Ash Street,
7 Broomfield. I am a member of Broomfield City Council Just
8 by way of a nickel's worth of introduction, I'm a 27-year
9 resident of the area and have lived with and drank water from
10 Great Western Reservoir for that period of time I have not
11 had a particular conflict with the mission of the Flats, but
12 our concerns began to be raised after the '69 fire, the '73-
13 '74 tritium spill, and other incidents after that that we
14 know about and perhaps some that we don't know about

15 The City of Broomfield appreciates the effort by
16 DOE, EPA and CDPHE to determine credible safe levels of
17 cleanup for radioactive contaminated soils And of course
18 the proximity of downstream water users and
19 residential/commercial activities at this DOE facility is and
20 has been a concern to the community and will be until all the
21 materials on site are cleared up and disposed of

22 Long-term public health and environmental and
23 economic interest to adjacent communities will forever be
24 influenced by decisions made by DOE and the regulators under
25 the CERCLA process

1 We will be submitting formal comments between now
2 and October the 4th, however, these are some preliminary
3 comments that we have come up with in the interim period

4 I'm glad to hear that the proposed standard is an
5 interim standard Broomfield is not completely convinced
6 that the proposed action levels are sufficiently protective
7 of long-term public health and is not satisfied that leaving
8 residual plutonium in the soil is a long-term public health
9 and--is in the long-term health and economic interests of
10 adjacent communities in northwest metropolitan areas

11 We are aware of off-site excursions, whether by
12 accident, whether by runoff, whether by wind resuspension,
13 and those continue to be concerns, particularly based on what
14 some of us believe are fairly high levels of proposed
15 residual leave-on

16 The current computer model documenting the dose
17 risk estimates should incorporate better information
18 regarding soil and wind erosion and mass loading into
19 downstream drainages and adjacent lands In any model,
20 whatever the parameter, whatever the metrics you choose,
21 there are bound to be some uncertainties, and I hear
22 everybody talk about erring on the side of conservatism, but
23 I think there'll be some discussion as to what the upper
24 limits of some of those parameters ought to be

25 Broomfield believes that additional technology

1 feasibility research and soil remediation techniques is
2 warranted immediately For instance There are cost
3 effective ways to remove hot spots--are there cost effective
4 ways to remove hot spots or sediment loading? Is DOE
5 actively investigating innovative technology for remediating
6 low levels of plutonium and soil? And some of what I mean by
7 that, and I spoke this afternoon, and there may be such a
8 vehicle available, that's a closed system that doesn't scarf
9 up the top six inches but maybe picks up the top inch or so
10 of the soil, thereby you clean up more soil, equal or less
11 volume, get the job done, and not have to put it off for five
12 years to decide if you made a mistake, because in the
13 meantime, this stuff is going to be floating around off the
14 site Future cleanup activities and soil contamination
15 upstream could substantially alter long-term prospects for
16 plutonium loading in the Walnut Creek drainage and in the
17 reservoir

18 As I said earlier, I'm glad to hear that the
19 current process is interim And whether or not 1585 or some
20 other adopted standard is where we ought to be is, I guess,
21 up to whoever devised those numbers and to what extent you
22 believe the numbers and to what extent you believe the
23 uncertainties that we don't know about are embedded and to
24 what degree they're valid

25 In the interest of making progress, Broomfield

1 supports DOE's program for making accelerated decisions for
2 those IHSS's which require immediate remedial action While
3 Broomfield in principle does not support returning
4 contaminated materials into the ground in a post remediation
5 scenario, in the interest of short-term waste management, it
6 may be a frugal decision as long as it's an interim decision
7 Broomfield's not convinced that the on-site level
8 ensures DOE's ability to comply with downstream water quality
9 standards and points of compliance. While the soil action
10 levels on site may deal only with on-site residents and
11 people, we all know, based on what has gotten off site by
12 various means, that this material will continue to migrate
13 off site, and that is, while it may not be directly related,
14 it is indirectly related, because to the extent that you have
15 higher soil action levels, there is a potential for more to
16 escape to the off-site reservoir sediments, off-site lands,
17 and so forth

18 Is the 1585 scenario consistent with the '85
19 lawsuit between landowners and DOE and the third party
20 beneficiary agreements, including the city, regarding soil
21 cleanup? Specifically--and we've talked about the state
22 standard, however, as I recall, some of those agreements
23 related to cleanup to the then state standard If that's not
24 the case, then I'd reconsider that statement, but in the
25 property that City of Broomfield owns, there never has or was

1 any remediation activity to dilute the 7, 8, 9, 10 picocuries
2 per gram on the ground, particularly at our southwest
3 property line southwest of the reservoir

4 We're unclear as to why the discussion has focused
5 on dose rather than risk, particularly the frequently cited
6 standard in 1×10^{-6} or 1 per million risk lifetime cancer In
7 light of the generally accepted disagreement over the long-
8 term health impacts of low-level radiation on human health,
9 how will DOE specifically plan for regular reevaluation of
10 the best available science in this area The City of
11 Broomfield expects DOE to plan along at least a 50- to 70-
12 year time horizon A 30-year time horizon as specified in
13 the model doesn't seem sufficient to represent a lifetime for
14 residents in the area, or a hypothetical resident residing on
15 site.

16 DOE and Kaiser Hill comments and documentation to
17 date argue the notion that aggressive remediation to lower
18 contamination levels will result in unmanageable volumes of
19 soil We're not convinced of this contention in light of the
20 fact that targeted hot spots over and above the 903 pad area
21 will be very specific and isolated It's conceivable to
22 envision a program for stage quantity shipments via rail
23 regardless of what the volumes are

24 And the point I touched on earlier, we're--and I
25 know that maybe RFCA suggests that we allocate part of the

1 budget immediately for cleanup, but any time in this country
2 we, as engineers, have put our mind to improving a
3 technology, such as a closed system which cleans up the upper
4 inch of soil, minimizing waste, I think that in the short
5 term we should allocate some funds at ways of looking at
6 doing a better job of cleaning up and reducing the amount of
7 material and volume that we have to ship somewhere or store
8 for some interim period until something develops

9 In reading through some books, I noticed an acronym
10 called A-L-A-R-A, ALARA (pronouncing), As Low As Reasonably
11 Achievable, and maybe this comes in somewhere, but I don't
12 hear too many people talking about as low as reasonably
13 achievable I think you ought to add that to your
14 vocabulary

15 As I said earlier, I'm glad this is a proposed
16 interim standard One of the concerns that concerns me the
17 most as an individual is that we all know this is not an
18 exact science Whether this is a screening model or not,
19 there is substantial uncertainty in the metrics, and for
20 those reasons I, personally, haven't decided yet whether this
21 proposed standard is good, is safe, or whatever, regardless
22 of what all the proponents of the science say

23 With that, I would thank you all for having this
24 meeting, and hope to continue to learn more about this and
25 discuss this further at later dates Thank you

1 MR CONNORS Thank you, Mr Stovall

2 We now have an empty sign-up list and an empty
3 microphone for anybody who would like to comment at this
4 time, or submit written comments

5 (Pause)

6 MR CONNORS With that, I'd like to thank you all
7 for coming out this evening and learning about this Steve,
8 thank you for your participation Bob, always good to see
9 you Thank you, folks

10 (Whereupon, the meeting was concluded)

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REPORTER'S CERTIFICATE

1
2 I, LYNNE DERBY, do hereby certify that I was
3 present at and recorded the proceedings in the foregoing
4 matter, that I thereafter reduced my recorded tapes to
5 typewritten form, comprising the foregoing transcript,
6 further, that the foregoing transcript is a full and accurate
7 record of the proceedings in this matter on the date set
8 forth

9 Dated in Denver, Colorado, this 24th day of
10 September, 1996

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12 Lynne Derby
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